5

10

15

## **ABSTRACT**

The present invention relates to a packet processing method using a multiple fault tolerant network structure, in particular to a packet processing method using a multiple fault tolerant network structure which is capable of performing communication of a whole ring and disusing a useless packet when a fault occurs on a plurality of connection lines and nodes by using a dual ring structure.

The present invention comprises dual nodes connected as a ring shape separately having two input lines and two output lines, wherein the one output line of the node is connected to an input line of an adjacent node, the other output line of the node is connected to an input line of a node next to the adjacent node, the each node selects one packet after receiving two inputs and disuses the other packet and transmits the select packet through the two output lines at the same time. The present invention can solve the fault problem occurred on a multiple link or nodes, can perform network function efficiently by disusing a useless packet, accordingly it is possible to perform stable operation for several years or several decades after the network installation and decrease maintenance expenses.

20

25